Capital Gains, Pension Funds and the Low Saving Ratio in the United States *

The question of the quality and reliability of statistical data has recently received increasing attention in the United States. The present paper deals rather with the interpretation of statistics; this may often be a difficult task for the general public, but one which economists should be competent to undertake.

The decline of the personal saving ratio to unusually low levels in the 80s in the U.S. has worried economists there. In this short note I hope to contribute something to the explanation of the low U.S. saving ratio.

A considerable part of household saving takes the form of contributions of employers to the pension funds and of premium payments of employees to life insurance companies. From the point of view of effective demand this should, in general, make no difference. It is in any case saving, invested in financial assets; only the household does not have full and direct control over it all the time. From a statistical point of view, however, a few complications arise. The U.S. National Income and Product Accounts (NIPA) as well as the Flow of Funds (FF) of the Federal Reserve credit the assets of the pension funds as a whole as well as the reserves of the life insurance companies against their policy liabilities to households. The implication is that the funds do not save, so all wealth accumulation is credited to the household. In accordance with this approach employers contributions to pension funds and life insurance premia are defined as labour income (supplements to wages and salaries)

* Acknowledgement is made to The Macmillan Press Ltd., London for permission to reproduce the first part of this paper from the author's *Economic Papers 1941-1988*, London 1990.

This paper owes very much to discussions with Athanasios Asimakopulos, Alois Guger, Peter Mooslechner, Frank Wilkinson and Ewald Walterskirchen.

and since they are not deducted when the take home wage is calculated, they are also included in disposable income. A subsidiary feature of the approach is that the benefits paid out by the pension funds and life insurance companies are not credited to disposable income, but instead the investment income (interest) of the funds and life insurance companies is so credited. If the two are not equal the balance is credited to the households as disposable income.

Since concepts and sources differ the two systems of data, the NIPA and the Flow of Funds, give different estimates for the household saving. The difference was relatively modest until the 1980s when the estimates diverged very strongly. The divergence is identical to the statistical discrepancy given in the Flow of Funds which amounted to $ 40 to $ 90 billion per year from 1980 to 1986 (Table 1). One reason for the divergence is the difference between benefits (pensions) and investment income of pension funds and life insurance companies which amounted to $ 20 billion in 1984 and rose to $ 35 billion in 1986. This excess of benefits reduced the disposable income and saving in NIPA but it did not affect the Flow of Funds data, so that saving there is correspondingly larger than in NIPA. Another reason for the discrepancy may be that NIPA does not include realised capital gains (because they are not income) while the Flow of Funds does. Realised capital gains accruing to the personal sector are of increasing importance in the "casino society" of the 1980s. As the *Survey of Current Business* (July 1988, Table 8.15) shows, they rose from roughly $ 30 billion in 1981 to $ 137 in 1986. The main source of these gains presumably lies in the re-purchase of shares at high prices as a consequence of take-overs (or of defensive measures by corporations threatened by raiders). The stock exchange boom of 1982-1987 has favoured speculative gains, as has the boom in real estate.

What is the importance of the realised capital gains for household saving? If the gains are made by households which hold shares directly or which get capital gains dividends from investment funds, and if they spend these gains on consumption, then the result will be a reduction in household saving as measured by NIPA. This is a spurious reduction because saving propensities have not changed and just as much is saved as before; the additional consumption is financed out of the capital gains. It is very difficult to estimate even approximately how much spurious reduction in saving may have been caused by realised capital gains of households. A large part of share

TABLE 1

HOUSEHOLD SECTOR
(Personal Sector in NIPA)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
1. Net Realised Capital Gains	24.5	27.7	29.7	31.1	35.0	50.6	56.2	69.8	137.1	
2. Discrepancy in FF	13.7	22.2	42.6	62.0	93.0	60.2	90.3	62.5	55.5	
3. Claims on Pension Funds and Life Insurance Co.s	88.5	106.1	118.5	116.0	127.3	150.2	134.3	150.5	146.9	
4. Employer's Contributions	44.0	48.9	54.7	60.2	57.4	57.3	57.2	54.6	52.3	51.5
5. Imputed Investment Income	31.5	37.1	44.5	51.7	72.9	86.8	98.4	112.8	121.3	131.3
6. Benefits (Pensions)	50.4		67.1	78.5	84.5	101.3	118.8	139.4	156.1	
line 6 minus line 5:	18.9		22.6	26.8	11.6	14.5	20.4	26.6	34.8	
7. Debt to Assets (Increments)	70.0	69.5	46.6	38.0	27.2	52.7	50.6	63.8	67.2	
8. Debt Increase in p.c. of Disp. Income			7.1	6.1	4.4	8.5	8.9	11.0	9.7	

Sources: OECD *Financial Accounts 1987; National Income and Product Accounts; Statistical Abstract* of the U.S.
Line 1: Net gains from sale of assets in personal sector (IRS).
Line 2: Discrepancy between savings estimates of NIPA and FF (FF).
Line 3: Increase in households claims on Pension Funds and Life Insurance Co. Policy Reserves (FF).
Line 4: Employers contributions to pension funds and profit sharing (NIPA).
Line 5: Investment income of pension funds and life insurance co. (interest imputed to households (NIPA).
Line 6: Benefits paid by life insurance co.s to policy holders and pensions paid by pension funds (*Statistical Abstract,* IRS).
Line 7: Increase in households liabilities in p.c. of increase in households assets (FF).
Line 8: Increase in households liabilities in p.c. of disposable income (FF, NIPA).

capital is held by households directly or indirectly (although some of it has been shifted to the pension funds in the course of time), but the holding, direct and via investment funds, is highly concentrated, so that only a fairly small proportion of the gains can have been consumed. Nevertheless it is possible that the saving rate has been reduced by something like a third to one half of a percentage point on account of realised capital gains of households.

Quite apart from realised gains the mere fact of the stock exchange boom has led to an appreciation of the assets of pension funds which it itself has led to considerable overfunding. This has led to an absolute and relative reduction in the contributions to the funds. The policy of the funds is to aim at a certain target investment which enables them to meet the pension claims. They are constrained by law to reduce their contributions if there is overfunding and the provisions have been made more stringent recently (Munnel 1987). In fact the employers contributions have declined absolutely from 1981 to 1987 by almost $ 10 billion; since they would normally be expected to rise roughly in the same proportion as the national wage bill we should have expected the contributions to be $ 90 billion instead of 50 billion in 1987 so that relatively speaking they have declined by $ 40 billion. Munnel gives an estimate of $ 30 billion up to 1980 (Munnel 1987). This caused a corresponding decline in personal saving as shown by NIPA. If we add to this the spurious decline on accont of the excess of benefits over investment income (see above) we get $ 60 to 75 billion which corresponds to about 2 to 2.5 per cent of disposable income. To this extent the reduction in the saving ratio is thus explained by factors which have nothing to do with the propensity to save in the accustomed sense. On the face of it you would say that the reduction in contributions has shifted saving from the household to the corporate sector. But the point is really that the whole change has been caused by the overfunding of the pension funds whose realised capital gains have been shifted to the corporation in form of reduced contributions. The question of what the corporation does with it may be left open: Whether they keep it, or pay it out as dividends which partly becomes consumption, or whether they pass it on in form of reduced prices (with constant mark up, in Kaleckian fashion) which leads to increased consumption ultimately financed by the capital gains. The genuine saving is therefore considerably higher than an uncritical interpretation of the saving ratio would make it appear.

The preceding analysis deals only with the financial saving of households. It is also of interest to find that the data on saving in the form of residential housing have been subjected to a critical analysis which makes them appear in a new light. Tibor Scitovsky has shown that a large proportion of the reduction in the personal saving ratio in the 70s was due to the fact that it was calculated net, and to the very high capital consumption allowances for dwelling houses which are used in deriving the net figures. These allowances increased to an extraordinary extent in the late 70s, owing to the inflation in housing prices (Scitovsky 1986). This kind of reckoning, Scitovsky argues, is unrealistic because it does not take account of the fact that as a result of the considerable increase in the value of their property house owners can realise capital gains which make it unnecessary for them to provide for replacement. If personal saving is calculated on a gross basis, then, as Scitovsky shows, the decline since 1977 is rather smaller than the decline of the net saving ratio given by NIPA. (The gross rate is also better suited for international comparisons in most cases.) There is, however, still a decline, that is, also the gross rate is lower than it was in the early 70s.

Professor Scitovsky's calculation extends only to 1979; I have made a very rough calculation for the years 1980 to 1987 by adding the capital consumption allowance (with adjustment) for owner occupied non-farm houses to net personal saving (Table 2). The dis-

TABLE 2

PERSONAL SAVING, GROSS AND NET

Year	Gross personal saving $ billions		Gross saving rate p.c.		Net saving rate p.c.	Saving rate gross of debt
1971	74.1		10.2		8.1	16.5
1972	68.1		8.7		6.5	17.0
1973	96.2		10.9		8.6	18.8
1974	105.0		10.8		8.5	16.0
1975	116.5		10.9		8.6	15.6
1976	107.1		9.2		6.9	17.1
1977	103.3		8.1		5.6	18.8
1978	109.9		7.7		5.2	19.3
1979	125.5		7.8		5.2	18.6
1980	145.6	154.4	8.2	8.4	6.0	15.5
1981		185.7		9.1	6.7	15.2
1982		208.2		9.6	6.8	14.0
1983		187.6		7.7	5.4	16.2
1984		224.1		8.4	6.1	17.3
1985		189.7		6.7	4.4	17.7
1986		188.3		6.2	4.0	15.9
1987		176.0		5.5	3.2	

Source: Col. 1-3: SCITOVSKY 1986 up to 1980, from 1980 own calculation. Col. 4: Col. 2 plus line 8 of Table 1.

crepancy between the gross and net saving rate has not increased since 1980, but if we add to the gross saving ratios the correction of about 2 to 2.5 p.c. mentioned above it appears that the dramatic decline of the saving rate becomes a rather less impressive experience.

We may still ask ourselves whether the decline in net saving which still remains after these corrections is not due to an increased inclination of households to go into debt. To get a measure of households' indebtedness I have expressed the increment of liabilities as a proportion of the increment in assets of households as given by the Flow of Funds (Table 1). It is not very clear whether there is evidence of a long term trend. What the figures show most definitely is the fact that indebtedness declines sharply in recession and increases in the boom: Thus from a low in 1981 and 1982 it rose to high levels in 1985 and 1986. Net saving therefore is high in the recession – the figures for 1974 and 1975 are not a good basis for comparison with the present – and it is low in the boom such as 1985 and 1986. This cyclical pattern, due to the increased importance of consumer durables and debt which behave rather like business investment, has been stressed before (Steindl 1982).

If we add the gross saving rate (from Table 2) to the borrowing of households (line 8 of Table 1) to obtain the saving rate gross of new debt we find that this shows a pro-cyclical pattern (Table 2, last column). If we added the 2 to 2.5 p.c. underestimate earlier mentioned to the figures for the latest years we find no negative trend in this gross saving ratio.

Thus, what remains of the low saving ratio is the strong disposition of the consumers of the 80s to indebt themselves. A plausible explanation for this can be seen in a combination of two circumstances: The favorable tax treatment offered to consumers who are able to deduct interest for income tax purposes, and the hausse in asset values which made many consumers more credit worthy and perhaps also more inclined to take credit. It has been shown that the same development of consumers credit has taken place in all those countries where the tax laws accord similar favours to the consumer and where the asset values increased equally strongly, *i.e.* in Skandinavian countries and England (Walterskirchen 1990). Even though consumers only followed the example of corporations and the government, their borrowing behaviour met with strong disapproval by economists. My own appraisal is different from that of most other commentators. I think that increased consumer borrowing has been

the main support of the long boom lasting from 1983 to recently. Indeed where else could the demand have come from? Private investment has not increased very much during the boom. The large budget deficit which is often quoted as an explanation is hardly more than sufficient to offset the depressing influence of the state and local surpluses and of the large foreign balance deficit. (From Table 3 it appears that the increase in consumption of durable goods plus residential construction amounted to much more than the increase in non-residential fixed investment; the balance of the budget deficit and foreign balance deficit became less and less of a stimulus as the boom proceeded and was in fact negative in 1987 and 1988.) Thus credit must be given to the consumer for having saved the day. In fact the peculiar nature of this boom – driven as it was, not by business investment, but by consumption – may to a great extent explain why it has lasted so long. The utilisation of capacity was kept high by consumption, exports and defense expenditure. Nor was there much chance of ending the boom in the alternative way, by running up against the ceiling of the system's capacity, because the imports offered an easy way out. At one point there was a scarcity of chips, which meant a serious bottleneck, but the imports from Japan filled the gap until new capacity was ready.

* * *

It is fair to say that the savings data have been shown to be misleading. But where is the snag?

TABLE 3

SOURCES OF EFFECTIVE DEMAND

	1982	1988
	billions $	
1. Durable consumer's goods	252.7	455.2
2. Residential fixed investment	105.1	232.4
3. Non-residential fixed investment	366.7	487.2
4. Government deficit	110.8	96.1
5. Foreign balance	–1.0	–117.5
6. 4 + 5	109.8	– 21.4

No doubt it would have helped if the pension funds had been made a separate sector in the NIPA, instead of being a part of the household sector. The employer's contribution would then have been credited to the pension fund, instead of being included in the take home pay. The separate treatment of pension funds would reflect their ambiguous nature: They belong to the employee in so far as they secure his pension rights, but the surplus due to overfunding belongs to the employer; in a number of cases the corporation has raided the fund to appropriate the surplus for its own purposes (Warshawsky 1988).

A much more general question is the treatment of realised capital gains. The NIPA exclude them, the Flow of Funds take the opposite view, naturally so, since they are concerned with all financial transactions and with assets as well as flows. What can be the place of the realised capital gains in the national accounts? They result from the sale of goods which are irreproduceable, but which from the business man's point of view are capital, an asset. The concept overlaps with the positional goods of Fred Hirsch (Hirsch 1976). Tibor Scitovsky (1987) has been acutely aware of the need for special attention to this class of goods. He argues that positional goods are different from ordinary consumption since they do not directly induce reproduction when they are bought and do not give rise to a multiplier. They are more like saving than consumption. But the positional goods which interest us here, such as land, are not considered consumption by the national accounts, they are simply disregarded. The argument (UNO 1968) is that when land is traded the seller receives what the buyer pays so the flow accounts are not directly affected. If for example the purchase is financed by credit the money lent by the banks to the buyer comes to them through the account of the seller.

But could there not be very strong effects on the flows? The value of urban land has tremendously increased in the course of time, and much of that gain has been realised when the land has changed hands. No doubt the capital gains have had their effect on distribution, on consumption and on investment and these effects as such are seen in the national accounts but they appear as spontaneous changes, and what has caused them remains in the dark behind the scene.

The realised capital gains act in some respects very much like income. They can be consumed without borrowing, leaving capital intact; and if they are not consumed they are invested in financial assets. This statement has to be qualified insofar as the purchasing

power of money changes; it is only the "real" capital gains *i.e.* those which go beyond the amount of inflation which can be consumed while leaving capital intact. But these admittedly unpleasant problems of adjusting for inflation are not peculiar or new. They occur in the assessment of net profits as well and could not therefore be a reason for not dealing with realised capital gains in the accounts. For simplicity we shall assume in the following that there is no inflation.

Even though realised capital gains act in some respects like income, they are neither production income nor transfer income (although ultimately, *i.e.* in the future, they are paid out of production income). I am going to suggest in the following a way of including realised capital gains in the National Accounts. I shall in the first place suggest an explicit inclusion of consumer's credit, which is a rather analogous problem, and perhaps easier to understand. Consumer's credit can finance consumption, and it may therefore be placed side by side with income as an offset against consumption in the outlay-income account (see below).

PERSONAL OUTLAY - INCOME ACCOUNT

Consumption	Personal income
Personal saving, gross	Consumer's credit
	Realised capital gains

INVESTMENT - SAVING ACCOUNT

Private investment	Personal Saving, gross of consumer's credit and of real. cap. gains
Consumer's credit	Corporate saving gross of real. cap. gains
Realised capital gains	
Budget deficit	Foreign balance deficit

The offset against this entry appears in the investment-saving account as dissaving (or quasi-investment) which is placed side by side with the investment. The purpose of this treatment is to display saving gross of consumer's credit: Consumer's credit, which is dissaving by some consumers, has to be financed by saving by other consumers and it is instructive to see the gross amount of positive saving involved. (This positive saving has also been estimated in Table 2 above for the U.S. data.)

Capital gains can be treated in an analogous way. Since they can be used to finance consumption, they may be placed side by side with income and consumer's credit. As a result the saving shown in the outlay-income account will be gross of consumer's credit and of realised capital gains of persons. This is to recognise that people with capital gains can use these for the finance of their consumption, and consequently are able to save the corresponding amount of their income. If an individual's capital gains are larger than his consumption, then we can nevertheless, from a macro economic point of view, apply the same reasoning to the whole of the consumers, arguing that the excess of capital gains of some will be lent by the banks to others to finance their consumption. The offsetting entry will again be dissaving in the investment-saving account which serves to reduce the gross saving to the net amount which balances with the private investment. To complete the picture, we have to enter the budget deficit as dissaving along with investment (which corresponds to normal practice) and the deficit in the foreign balance as an addition to domestic saving in order to obtain the offset against private investment.

In a more elaborate presentation we may introduce a separate Realised Capital Gains Account as an intermediate between the above two accounts; this may be used to collect the capital gains of persons and of business into one sum which is then transferred to the investment-saving account. In the same way we may also interpose a separate consumer's credit account between the above accounts.

It may have become clear in the course of the discussion that the question raised is really not so much, or not only, one of the extension of the National Accounts, but rather of the Keynesian macroeconomic paradigm. The role of investment, or of the budget deficit, as a more or less spontaneous force creating demand and setting in motion a multiplier can also be taken by consumer credit and by realised capital gains which are created by a rise in land and share values based on anticipations and aided by bank credit. Even though only a part of the capital gains are likely to be spent, at least in the short run, this is a net effect on demand because the rise in capital values has been built on bank credit and on spending from accumulated wealth, not from current income. No doubt there is a vast redistribution involved in the underlying process: The users of dwelling space ultimately pay for the increase in land values, and the take-overs involve a vast redistribution of power and wealth between

interest groups. It may well be asked whether more would not have been achieved by using the credits for productive investment. This is only too true. But the purpose of asking for more light on the capital gains is not to eulogise the "casino society", but simply to get a clearer and fuller account of contemporary events.

* * *

After so much statistics a word on economic policy is in order. There has been a system of national old age insurance even before pension funds existed. It has been, up to 1983, based on the principle that the active population supports the retired (pay as you go). This is in fact as it always has been, and as, in essence, it must be under any system; but it was made into a national institution with fixed contributions by employees and their employers, and settled benefits for the retirees. If there is a short term gap, the government directly or indirectly has to fill it. In the long run any imbalance has to be dealt with by changing either contributions or benefits. Thus the pensions are financed by a shift of income from one part of the population to the other and time does not enter in any relevant sense. The old people's bread is not accumulated for them over their life time, it is delivered to them fresh from the baker. There is no capital and no interest. Why has it been necessary to supplement this system by another one with $ 2.6 trillion in financial assets ($ 1.5 for the private pension funds alone) which has had a profound influence on the whole economy?

While this accumulation has been going on, in the build up period, there had to be a corresponding amount of saving which has been at the expense of consumption. The effect of this has been described in my earlier paper on household saving (1982). It depressed the national product, and in this way produced the budget deficits which *indirectly* were financed by the pension funds. This effect was particularly undesirable in the seventies, when the growth rate had slowed down. A second effect occurred in the financial sphere. The funds gained an enormous importance since they moved great amounts of assets and managers frequently found it advantageous to engage in block trading off the floor of the stock exchange. They also contributed much to the introduction of options and index trading. On account of their extensive experience and knowledge the managers of the funds gained a great influence also on the take overs. The funds thus played an important role in the establishment of the modern "casino society".

Furthermore; the kind of insurance associated with the funds contributed to the large differentiation in the labour market between the large corporate sector and the rest due to fringe benefits. Most people would agree that this is a regrettable development. But in fact the origin of the whole system is plausibly to be found in the wish of the major corporations to have a well paid and satisfied work force tied to the firm by fringe benefits such as pensions. Government and social security administration were both passive, paying attention only to the unpopularity of new taxes, although it might have been possible to extend the social security system so as to adapt it to the needs of the growing prosperity and differentiation of society.

What may be the advantages of the pension funds which justify the large social cost enumerated in the three points mentioned above? The individual wants to get the pension he thinks he has paid for, even though this may be an illusion. He distrusts the stability of the public security system, even though the pension funds do not necessarily offer more security. One may have great sympathy for the modern trend of people wanting to shape their life according to their individual needs and tastes and yet doubt whether pension funds and private insurance contribute anything very essential to this aim. Those who shape economic policy and their advisers do not seem to be aware of the unfortunate negative aspects of the system or they would not have changed the social security system in 1983 from a "pay as you go" system to one based on the insurance principle (the excess of security taxes over benefits was $ 52 billion in 1989) which promises in good part to repeat the regrettable implications of the pension funds.

Wien

JOSEF STEINDL

BIBLIOGRAPHY

FEDERAL RESERVE SYSTEM (1975), *Introduction to Flow of Funds*. Washington.

OECD (1988), *Financial Accounts of the OECD Countries 1987*. Paris.

HIRSCH, F. (1976), *Social Limits to Growth*. Harvard University Press. Cambridge, Mass.

MUNNEL, A.H. (1987), "Pension Contributions and the Stock Market". *New England Economic Review*. Nov. Dec.

SCITOVSKY, T. (1986), "An Anomaly in the U.S. Personal Income and Saving Statistics", J. S. Cohen and G.C. Harcourt (eds.), *International Monetary Problems and Supply Side Economics*. Macmillan London.

SCITOVSKY, T. (1987), "Growth in the Affluent Society", *Lloyds Bank Review*, no. 163, January.

STEINDL, J. (1982), "The Role of Household Saving in the Modern Economy", in this *Review* no. 140, March.

UNO (1968), *A System of National Accounts*. Washington.

WALTERSKIRCHEN, E. (1990), "Budgetsanierung in Europa". *Monatsberichte des österreichischen Instituts für Wirtschaftsforschung*. January.

WARSHAWSKY, M.J. (1988), "Pension Plans: Funding, Assets and Regulatory Environment", *Federal Reserve Bulletin*. Nov.